SELF-ACTUALIZATION AND GRADE POINT AVERAGE INVESTIGATION OF STATISTICAL CORRELATIONS

Harry Cole Leeper

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THESIS

SELF-ACTUALIZATION AND GRADE POINT AVERAGE
INVESTIGATION OF STATISTICAL CORRELATIONS

by

Harry Cole Leeper, Jr.

March 1975

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In addition, the results of scores obtained from the Shostrom POI, a personality inventory constructed to measure levels of self-actualization, is correlated to the grade point averages of the aforementioned students. A curvilinear relationship was found between some of the scales of the POI and academic achievement.

In conclusion, the limitations of the study as well as possible avenues for future research are discussed.

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Submitted in partial fulfillment of the
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TABLE OF CONTENTS

I. INTRODUCTION---------- 6

II. HISTORICAL VIEW OF SELF---------- 9

A. THE CLASSICAL AND CONTEMPORARY VIEWS OF SELF- 11

1. The View of the Classical School--------- 11

2. The View of the Contemporary School------ 14

III. REVIEW OF LITERATURE---------- 19

A. HISTORY OF SELF-ACTUALIZATION---------- 19

B. MASLOW'S SELF-ACTUALIZATION CONCEPT---------- 23

1. Characteristics of Self-Actualizing Man-- 29

IV. SHOSTROM'S POI---------- 42

A. PAST STUDIES ON THE POI---------- 42

B. THE POI SCALES AND INTERPRETATION---------- 43

C. CRITIQUE OF THE POI---------- 47

V. CORRELATION OF QPR TO POI SCALES---------- 51

A. REASONS FOR RESEARCH---------- 51

B. DESCRIPTION OF SAMPLE---------- 52

C. ANALYSIS OF DATA AND METHODOLOGY---------- 53

D. RESULTS---------- 54

VI. CONCLUSION---------- 63

BIBLIOGRAPHY---------- 64

INITIAL DISTRIBUTION LIST---------- 67

I. INTRODUCTION

For many years, educators and students alike, have endeavored to identify both intellectual and non-intellectual predictors of academic performance. The professors and students at the Naval Postgraduate School are no exception. Since 1963, several studies have been conducted by these professors and students to find the various factors which could be used to predict academic achievement. Research with the Graduate Record Examination has led the numerous studies directed at finding suitable intellectual predictors; however, factors which might affect performance (but not classified as intellectual predictors) have been given relatively little attention.

In the author's opinion, such factors which stress the individuals development as a more perfect being, are considered of equal importance to those factors which measure degrees of "intelligence." The concept of self-actualization is such a factor.

Maslow [1955,8] has defined self-actualization as an

> "on-going actualization of potential capacities and talents, as fulfillment of mission or call or fate or vocation, as fuller knowledge of, and acceptance of, the person's own intrinsic nature, as an unceasing trend toward unity, integration or synergy within the person."

Self-actualization, however, does not merely lie dormant in this definition. The notion that self-actualization is an important and generalized drive is supported not only by

clinical observations, but by interpretations of historical movements. James Truslow Adams [1944,5], in commenting on the great westward movement from Europe, made this statement:

> "The American dream which has lured tens of millions of all nations to our shores, has not been a dream of merely material plenty, though this has doubtlessly counted heavily. It has been much more than that. It has been a dream of being able to grow to fullest development as man and woman, unhampered by the barriers which had slowly been erected in older civilizations, unrepressed by social orders which had developed for the benefit of classes rather than for the simple human being of any and every class."

Maslow [1970,xii] expressed thoughts similar to that of Adams in his later writings:

> "Human life will never be understood unless its highest aspirations are taken into account. Growth, self-actualization, the striving toward health, the quest for identity and autonomy, the yearning for excellence (and other ways of phrasing the striving 'upward') must by now be accepted beyond question as a widespread and perhaps universal human tendency."

Intrigued and challenged to better understand this human tendency of striving "upward," this author was led to examine the available literature on the concept of self-actualization.

Being a student of management theory and practice, the purpose of such a literature search was not only to gain a better understanding of the concept, but also to evaluate the feasibility of using such a concept as a managerial tool, namely, as a predictor of academic performance at the Naval Postgraduate School.

In particular, then, this thesis was developed around four aspects of self-actualization and is presented, herein, within this framework. The first part endeavors to look at the concept of self and how this concept has been developed

through history, both as a function of man and his environment. Views are offered from both the classical and contemporary schools of thought, as the link between self and how management has handled this evolutionary concept is established.

Secondly, this thesis attempts, through a review of the literature, to examine the traits of a self-actualized person. This section is set forth in an effort not merely to identify lists of traits, but also to develop a more complete description of the concept of self-actualization.

In the third phase of this thesis, this author returns to being a student of management in search of usable tools. The Shostrom POI test is analytically considered as being a valid measure of self-actualization.

In the fourth section, the following hypothesis will be tested: There is a direct correlation between graduate students' grade point average (henceforth QPR)[1] and scores obtained on the Shostrom POI, within the Information Systems (Telecommunications) curriculum at the Naval Postgraduate School, Monterey, California.

The limitations of the study as well as possible avenues for future study are then offered in conclusion.

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[1]QPR is an abbreviated form for "Quality Point Rating," and is commonly referred to (at other schools) as the student's grade point average.

II. HISTORICAL VIEW OF SELF

The concept of self-actualization is not new, although the term itself was first coined by Kurt Goldstein [1939,203] in 1939 as the one fundamental human motive from which all other motives arise.

The basis of self-actualization is found in humanistic ethics, as illustrated in the different meanings attached to the word "virtue." Aristotle, as translated by Ross [1925, 3-5], used the word virtue to mean excellence -- excellence of the activity by which the potentialities peculiar to man are realized.

Spinoza, as cited in Ethics [1927], like Aristotle, inquired into the distinctive function of man. "To act absolutely in conformity with virtue is, in us, nothing but acting, living, and preserving our being as reason directs, from the ground of seeking our own profit." Preserving one's being, to Spinoza, meant to become that which one potentially is. Spinoza's concept of self-interest is not a selfish drive, but rather an explanation of the real interest of all men -- the full development of himself as a human being.

According to Erich Fromm [1947,135], however, the concept of self-interest has changed dramatically in the past three hundred years. Instead of being an objective view of man, striving to develop himself as a human being, the concept of self-interest has assumed the narrow view of selfishness. This view has evolved primarily from the Calvinistic Doctrine,

which taught that man must suppress his self-interest and consider himself only as an instrument of God's purposes. What has happened, according to Fromm [1947,136], is that man has accepted the contents of Calvinism while rejecting its religious formulation.

This deterrioration in the meaning of the concept of self-interest is closely related to the change in the concept of self. In the Middle Ages, man was part of the social and religious community, and he conceived his own identity by relating to this community.

During the eighteenth and nineteenth centuries, the concept of self narrowed; one's self was felt to be constituted by the property an individual possessed.

William James [1896,319] stated that in recent times under the influence of the market place and the need for physical survival, man's concept of self shifted from meaning, "I am what I possess," to meaning, "I am as you desire me to be." Man, therefore, became a commodity for sale in the market place.

Around 1920, with his physical needs essentially met, man, according to William Repp [1971,541], began to be more concerned with his health and security -- thus the growth of the labor movement which attempted to satisfy this level of needs. Then during the 1960's, man not only wanted people to like him, but he wanted to like himself and others more. Movements for equal opportunity and human rights gained increasing impetus. Their goal was to make it easier for everyone to achieve all that he was able to achieve.

In the late 1960's and early 1970's, a new generation of employees evolved. In general, they took affluence for granted, expected good salaries, and were more concerned with the quality, rather than the quantity of life. These affluent employees would no longer be motivated by extrinsic rewards alone; they sought out other rewards for motivation -- ego satisfaction and self-actualization.

A. THE CLASSICAL AND CONTEMPORARY VIEWS OF SELF

Thus far, this section has traced some of the historical basis for the concept of self. It must be remembered, however, that management was also evolutionary in its dealings with such a concept. Views from two schools of thought are presented below, in an effort to examine how management has dealt with the changing times.

1. The View of the Classical School

In order to view the classical school of management, man must be viewed in the total perspective of the time and situation.

The early and rather widespread view of man was that he is selfish, rebellious, and uncooperative. Left to his own devices, he tended to act in a mean and base manner. Therefore, the leader must be ruthless and strict in the way he controlled his men. This reasoning was classically displayed by Niccolo Machiavelli [1947] in 1513. He emphasized what is referred to as the "means-end" concept of leadership. The leader must follow any tactics that will maintain his position of power. Machiavelli asserted that it was desirable

for the ruler to appear humane, but he should always be ready to follow the path of evil if the occasion should arise, governed only by the winds of fortune.

Thomas Hobbes [1958] asserted that men were acquisitive, and sought power and prestige. Therefore, man must submit to the authority of the leader to regulate and constrain these selfish tendencies.

In the capitalistic societies of the Western World, the basic moral values to be derived from hard work, self-denial, saving, and the pursuit of monetary gain have been preached, directly and indirectly, over the years. Max Weber [1930] traced this blending of the ideas of capitalism and those of Protestantism. The aforementioned behavioral philosophy has been called the Protestant Ethic.

The ideas which Adam Smith propounded in his Wealth of Nations (1776), according to Dale Beach [1970,22], have served for nearly two hundred years as the basis of our capitalistic system, and in his propositions about our economy are found some elements of the concept of self-actualization. Smith argued that the wealth of a nation was best served when everyone pursued his own self-interest. Each man may and should seek as much private gain as possible, thus allowing the forces of competition in a free market to serve as a self-regulating mechanism. Unrestrained competition and profit maximization ultimately would result in the public good, even though the individual sought only his own private gain.

The economic-man theory, presented by Adam Smith, was followed by a management philosophy which is referred to today as paternalism. Reported by Beach [1970,51], management treated its employees well by providing job security, decent working conditions, and adequate pay. In return, employees were expected to be cooperative, loyal, and productive. One of the pioneer industrialists, Robert Owen, who wrote A New View of Society (1813), typified the paternalistic employer. Owen displayed concern for the welfare of the worker, but in so doing, his goal was to maximize profits. To Owen, the authority of the employer was supreme. He considered the workers somewhat like children, who had to be molded by strict discipline, guided, and then protected.

John Stuart Mill, in his Principals of Political Economy, stated that the lot of the worker should be regulated for them, not by them. The rich should stand to the poor as parents to children. The poor should do nothing but work, be moral, and be religious.

It is seen from these approaches that the classical manager, in his view of the worker, made the assumptions that the worker was basically incompetent, and that he was primarily motivated to maximize his own economic gain.

The classical view of management is best summarized by Douglas McGregor in his "Theory X" management concept. McGregor [1960,33-43] pointed out the basic assumptions made by management; the average worker had an inherent dislike for work, avoided responsibility, lacked ambition, and wanted close direction. The motives of man that were tapped were

primarily Maslow's [1970,35-45] lower order needs; i.e., physical and economic security. People were induced to produce through what Frederick Herzberg [1966] referred to as, "the carrot and the stick"; monetary incentives for good performance, and threats, fear, and the spectre of discharge for misbehavior.

As was evidenced from classical managements' points of view, the concept of self-actualization remained centered, not on the development of the individual to his fullest potential as was embodied in the works of Aristotle and Spinoza, but rather from the selfish point of view that was dominant at the time. The employee was to assume only the role which management had cast -- the role of a commodity for sale on the labor market. As James [1896] said: "I am as you desire me to be."

2. The View of the Contemporary School

As already seen, classical management, due to the attitudes of the time, was concerned primarily with satisfaction of only the employee's lower order needs. With the lower order needs satisfied, however, Repp [1971,541] reported that what remained to be satisfied were the needs for self-esteem and self-actualization.

According to Ernest Dale [1969,425], the inadequacy of the classical reward and punishment (carrot-stick) system had always been recognized to some extent, but well into the twentieth century, management tended to regard it as at least good enough.

Just before World War I, managers began to hope that the comparatively new science of psychology would provide more effective means of tapping the latent potential of their employees. Interest in psychology grew during the 1920's, particularly in psychological testing, to ensure better placement of employees. Various welfare measures such as health facilities, wash-up and locker facilities, lunch rooms, group insurance and pension programs, savings, and legal aid programs were adopted to insure the happiness of the worker.

Frederick W. Taylor, in his Principles of Scientific Management, exerted profound effect upon management thought and practice. Taylor [1919] preached cooperation between labor and management, but in a different manner than others of the time. Taylor believed that management and labor would undergo a "mental revolution," with both working toward the same end. He dealt with more than just pay scales, and his efforts contributed greatly to the professionalization of management. It elevated "management by plan, system, and design" while causing "management by hunch" to decline.

Roethlisberger and Dickson [1939] noted that research, conducted at the Hawthorne Works of the Western Electric Company by Elton Mayo (*et. al.*), marked the beginning of the human relations movement. After considerable analysis, the researchers concluded that sociological and psychological phenomena often exerted even greater influence upon output than did physical, measurable conditions of work.

These rosy possibilities promised by industrial psychology and the human relations movement almost vanished, however, with the advent of the Great Depression. Many companies were fighting for mere survival, and the power to discharge an employee gained new force. Once out of a job, many remained unemployed for a lengthy period of time.

Then beginning in 1935, according to Ernest Dale [1969,426], with the passage of the Wagner Act, widespread unionization occurred. The process of collective bargaining and the voice gained by labor, according to Beach [1970,83-111], had, through mere strength in number, forced management to recognize the inadequacies of the reward-and-punishment system and to look toward new methods of motivating the employee.

Douglas McGregor [1960,47-48] asserted that management must develop a new way of thinking about man, his work, and the process for managing him. It was managements' function to provide an environment in which the worker could grow to his fullest potential, not as management saw it, but as the worker viewed it himself. Management needed to encounter the individual and give him the opportunity to grow, and through this mutually enhancing approach, a greater degree of productivity would result.

Frederick Herzberg [1959,113-117], in his two-factor theory of management, also recognized the need for self-actualization on the part of the worker. Herzberg asserted that the factors that lead to positive job attitudes do so because they satisfy the individuals need for self-actualization.

When the job does not meet this need, the worker channels his talents (such as creativity) to other activities, or fails to use them at all. It is management's function, according to Herzberg, to provide a work environment in which the individual has the opportunity to self-actualize, through the accomplishment of meaningful work.

In his studies, Herzberg found that such things as poor pay, poor working conditions, job insecurity, etc., are merely "hygiene factors"; that is, just as a lack of medical hygiene may cause disease, hygienic conditions will not cure it. Thus, proper pay and working conditions, plus job security, while correcting dissatisfaction, do not create satisfaction. Herzberg asserted that the only way job satisfaction could occur was through the use of "motivators," which included the opportunity for advancement, the opportunity for performance of meaningful work, and recognition. Only these motivators served to aid the employee in satisfying the need for self-actualization.

The contemporary school has also recognized that in order to tap the worker's full potential, the worker must be committed to the organizational goals; and that by providing the opportunity for self-actualization, management can obtain this commitment.

Rensis Likert [1960] typified this point of view in his writings. He pointed out that what management must do, is make full use of its human resources through the application of positive motivation, which provides for the opportunity of self-actualization.

It can be seen from this section that the contemporary mode of management has come into being, not from some mental revelation, but rather from a gradual and evolutionary process, predicated on the factors which serve to motivate the individual toward his level of need satisfaction.

It is within this evolutionary environment that the concept of self-actualization had its birth; thus, for this author, an understanding of the environment has become a prerequisite for a better understanding of the concept itself.

III. REVIEW OF LITERATURE

A. HISTORY OF SELF-ACTUALIZATION

The term "self-actualization," like that of self, has a complicated historical background. Maslow spoke of a self-actualizing person as "a person who is more fully functioning and lives a more enriched life than the average person." Maslow [1968] also stated that such an individual was seen as utilizing all of his unique "capabilities and potentialities," free of the inhibitions and turmoils of those less actualized.

Maslow, however, while a prominent author, was not the only author to have written about the concept of self-actualization. Carl Rogers, Gordon Allport, Everett Erb, and James Coleman are others who have offered traits of the more fully functioning person, or as Shostrom, have offered an operational definition of the concept.

Before considering self-actualization from an operational viewpoint, it would be worthwhile to investigate its philosophical basis, such as that developed by Ommanney and Fifield [1974], through the writings of Rogers, Allport, Erb, Coleman, and others.

Self-actualization, while being different from existentialism, is closely related to existential philosophy. Cofer and Appley [1958,656-660] reached this conclusion while investigating self-actualization and other related concepts.

Existentialism presents the viewpoint that man is free to choose one or many alternatives from a list of possible choices. This is not to say that man will always succeed, but rather that he is merely free to make a choice. Man, therefore, cannot be manipulated as things are.

Barrett (in Cofer and Appley, p. 658) sees the historical meaning of existential philosophy as a struggle to awaken in the individual the possibilities of an authenic and geniune life.

May, *et. al.*, (in Cofer and Appley, p. 659) make a similar point:

> "When a culture is caught in profound convulsions of a transitional period, the individuals in the society understandably suffer spiritual and emotional upheaval, and finding that the accepted mores and ways of thought no longer yield security, they tend either to sink into dogmatism and conformism, giving up awareness, or are forced to strive for a lightened self-consciousness, by which to become aware of their existence with a new conviction and on a new basis."

Ellenberger (in Cofer and Appley, p. 659) summarizes this aspect of existentialism:

> "Man is not a ready-made being; man will become what he makes of himself and nothing more. Man constructs himself through his choices, because he has the freedom to make vital choices, above all the freedom to choose between an inauthenic and authenic modality of existence."

Existential freedom, then, seems to indicate that man has the freedom to try to succeed. It is also this thought which describes a self-actualizing person active within his environment. Maslow said that the self-actualizing person is living within the present versus merely preparing for the future.

Allport [1955], in his thoughts concerning a "mature personality," was similar to Maslow's concept of the

self-actualizing person. Allport spoke of becoming one who could organize "transitory impulses into a pattern of striving and interest in which the element of self-awareness plays a large part...."

Allport [1961] set forth the following as a basis for maturity of personality:

1. extension of sense of self -- life is not just need reducing, but extends outside of oneself to ambitions, hobbies, ideas, friends, etc.,

2. warm relations with others -- compassionate; he is appreciative and respectful of the human condition of man,

3. emotionally secure -- accepts himself; is able to tolerate frustration; keeps things in perspective,

4. realistic perception of his skills and assignment -- is able to handle problems and tasks before him,

5. self-objectification -- he is able to see himself as he is, and can laugh at himself,

6. unified philosophy of life -- has a clear comprehension of what he sees as life's purpose.

Erb [1967] has set forth different criteria for what he calls "the emerging self." Among the criteria listed are:

1. questions do's and don'ts and is continually formulating and revising his value system,

2. has understanding, empathy, and insight,

3. has friends from various economic, social, and occupational groups,

4. cares what others think, but does not let this dictate his action,

5. suffers few regrets,

6. enjoys privacy,

7. is neither overly pessimistic nor optimistic,

8. has a continuing freshness of appreciation.

Erb believed that the actualizing person had a distinctive mental set which he called that of being open to experiences. He stated that any person can be actualizing if he rises above mere "mechanical traits" and becomes a more fulfilled person.

Hahn [1963] said that the self-actualized individual was rare in today's society. He stressed, however, that the self-actualizing individual was efficient, able to solve problems at a complex level, able to use new solutions, was often a leader, free in self-expression and independence, and often demonstrated that achievement was correlated with peak experiences.

Coleman [1960] described self-actualization as a constant process moving along a continuum. The self-actualizing individual was free from serious conflicts with his own environment and had freedom of directional change, such as moving from:

1. dependence to self-direction -- responsible for making his own decisions and living by or accepting their consequences; living by an integrated system of personal values which were more dependent on dedication than fear from punishment,

2. pleasure to reality -- makes sacrifices in the present to reach long-term goals; develops tolerance and resiliency,

3. ignorance to knowledge,

4. diffuse sexuality to heterosexuality,

5. amorality to morality,

6. incompetence to competence -- finds satisfying ways of expression and dealing with unpleasant emotions; effective relationships; consistently tries to improve the quality of his experiences,

7. self to other centeredness -- he helps others feel adequate and approved of; can accept a person while criticizing him, and feels free to express praise and appreciation.

Rogers [1961] described the seventh stage of development of a person as a "fully functioning person." The characteristics which he included in his concept of self-actualizing were fluidity, acceptance of feelings, tentativeness of constructs, realness of relationships, and integration of functioning.

Gale [1969] wrote of the self-actualizing person as one who tried to increase his self-activity by doing everything fully and well; and wanting life to reflect both the processes of learning and relearning.

Thus, self-actualization has been equated with positive mental health and a healthy personality. Jepson [1969] in speaking of Maslow's writings, acknowledges that self-actualization only occurs when the cognitive need for knowledge has been satisfied.

B. MASLOW'S SELF-ACTUALIZATION CONCEPT

The previous section has been set forth to explain the philosophical basis for the concept of self-actualization and

has briefly noted some of the writings of other authors on the subject.

It has been this author's experience, however, to have been exposed (through reading of the available literature on self-actualization) to more of Maslow's work than that of any other author. Some of his thoughts on the concept follow.

Maslow [1970,33] described his emphasis toward the study of the psychologically healthy:

> "Most of what we know of human motivation comes not from psychologists but from psychotherapists treating patients. These patients are a great source of error as well as useful data, for they obviously constitute a poor sample of the population. The motivational life of neurotic sufferers should, even in principle, be rejected as a paradigm for healthy motivation. Health is not simply the absence of disease or even the opposite of it. Any theory of motivation that is worthy of attention must deal with the highest capacities of the healthy and the strong man...."

Maslow [1970,xii-xiii] emphasized health more so as he generalized:

> "Human life will never be understood unless its highest aspirations are taken into account. Growth, self-actualization, the striving toward health, the quest for identity and autonomy, the yearning for excellence (and other ways of phrasing the striving 'upward') must by now be accepted beyond question as a widespread and perhaps universal human tendency."

On a more personal note, Maslow [1971,41-42] wrote:

> "My investigations on self-actualization were not planned to be research and did not start out as research. They started out as the effort of a young intellectual to try to understand two of his teachers whom he loved, adored, and admired and who were very, very wonderful people."

In the same passage he continued:

> "When I tried to understand them, think about them, and write about them in my journal and my notes. I realized in one wonderful moment that their two patterns

> could be generalized. I was talking about a kind of person, not about two noncomparable individuals. There was wonderful excitement in that. I tried to see whether this pattern could be found elsewhere, and I did find it elsewhere, in one person after another." [1971,41-42.]

The emphasis on healthy personalities, therefore, has been emphasized and stamped across the writings of Maslow. He concluded in his work that neurosis and other illness were, therefore, brought about by the absence of certain "healthy" gratifications.

He built these thoughts into his concept of instinctoid needs. Maslow saw instinctoid needs as breeding illness when absent and preventing illness when present.

Maslow classified these instrinctoid needs into two categories: Being-needs and Deficiency-needs, referred to henceforth as B-needs and D-needs, respectively.

The D-needs, also referred to as the basic needs, are characteristic of the immature; however, they form the comparative foundation upon which the B-needs are based.

Maslow [1970,35-46] has listed four needs which he classifies as D-needs. These are: (1) physiological needs, (2) safety needs, (3) belongingness and love needs, and (4) esteem needs.

The physiological needs are the most prepotent of all. These include the needs for food, oxygen, water, sleep, sex, and so forth, among the list of many. When these needs go unsatisfied, all other needs may become non-existent, for the physiological needs tend to dominate the organism.

The safety needs emerge when the physiological needs are satisfied. Security, stability, dependency, protection,

freedom from fear, need for structure, order, law, etc., have all been included as illustrative of the safety needs. The need for safety is also seen as a dominant mobilizer in emergencies, e.g., war, natural disasters, and the like.

The belongingness and love needs surface only after both the physiological and the safety needs are fairly well gratified. The needs of love, affection, and belongingness are stressed, here, as well as the need to overcome widespread feelings of alienation, aloneness, strangeness, and loneliness. Maslow also makes note that these needs are equally balanced: the side of giving is equally as important as receiving.

Almost all have a desire or need for a high and stable evaluation of themselves. Such self-respect, self-esteem, and the esteem for others are characteristic of what Maslow terms esteem needs. Again these needs have their place in the hierarchy, and can be gratified only when all other more primitive needs are satisfied.

Each of these D-needs represents a step "upward" and a necessary foundation upon which a higher, healthier, personality can be built. Once satisfaction has been achieved for these basic needs, one can then discuss the B-needs, or as Maslow [1968,25] wrote:

> "So far as motivational status is concerned, healthy people have sufficiently gratified their basic needs for safety, belongingness, love, respect and self-esteem so that they are motivated primarily by trends to self-actualization...."

The B-needs, as proposed by Maslow [1970,46-51] are:

(1) the aesthetic needs,

(2) the need to know and understand, and

(3) the need for self-actualization.

The aesthetic needs are, according to Maslow [1970,51], some of the least understood. He postulated that in "some" individuals there is a truly basic aesthetic need. They get "sick" from ugliness in the surroundings and can be "cured" by presence of beauty. Maslow found these needs seem almost universal in children.

While not devoting much time to the development of the aesthetic needs, Maslow points out that there is much overlap of the aesthetic needs with the cognitive needs which are discussed next.

The second B-need discussed is the need to know and understand, sometimes referred to as the cognitive need.

Maslow [1970,48] indicated that there are reasonable grounds for postulating positive impulses to satisfy curiosity, to know, to explain, and to understand. Studies of healthy people have indicated that they are attracted to the mysterious, to the unknown, to the chaotic and unorganized, and the unexplained. It is within this unorganized whole that the healthy person looks to systematize, to organize, to analyze, to look for relations and meanings, and to construct a system of values.

This cognitive need was postulated by Maslow as being basic to man's nature, as seen by the passage:

> "The needs to know and understand are seen in late infancy and childhood, perhaps, even more strongly than

in adulthood. Furthermore, this seems to be a spontaneous product of maturation rather than of learning, however defined. Children do not have to be taught to be curious...." [1970,50.]

Even if all these needs are satisfied, we may often find a discontent or restlessness developing, unless the individual is doing what he, individually, is fitted for. This serves as Maslow's introduction into the explanation of the need for self-actualization. [1970,46.]

The most general of the B-needs is the need for self-actualization.

The positive criteria for selection as a self-actualized person (or as Maslow more often refers -- a self-actualizing person) is as yet difficult to describe. Maslow's criteria may be best understood by considering some of the people he considered as self-actualizing. They included: Lincoln (in his later years), Thomas Jefferson, Einstein, William James, Spinoza, and Eleanor Roosevelt, along with many unidentified friends and contemporaries.

Each of these people, according to Maslow, were continually in the process of becoming what they had the potential to become. For the sake of discussion, the need for self-actualization can be loosely termed as the full use and exploitation of one's talents, capacities, potentials, etc.

Maslow seemingly indicates that the individual who has satisfied his D-needs is in the process of satisfying his B-needs and becoming that which he potentially is; therefore, he is satisfying his need for self-actualization.

Maslow's hierarchy of motivation runs parallel to that of the hierarchy of needs. Maslow indicated that as the higher needs emerge, they then become the motivating force for the individual. The lower needs remain but no longer dominate.

Self-actualization is such a motivating force; and the process of self-actualization is that of individual growth, the gradual unfolding of the individual's potentialities.

Maslow views this growth as a continual series of choices that face the individual throughout his life. Each choice can represent a step from the familiar to the unfamiliar, a step from the known to the unknown.

This concept of growth underlies the characteristics of Maslow's concept of self-actualization. For Maslow, gratification of the Being-needs is the furthest development of his capabilities. Thus, for Maslow, this indicates the furthest reach for man.

At the peak of the need hierarchy, therefore, is the self-actualizing individual who lives at the farthest reach of human nature.

The next section examines his characteristics.

1. Characteristics of Self-Actualizing Man

This section is written in an effort to understand the characteristics which define and, yes, motivate the self-actualizing man. A discussion of these traits, as formulated by Maslow, follows.

a. More Efficient Perception of Reality and More Comfortable Relations With It

Maslow [1970,153] wrote that a neurotic is not only relatively but absolutely inefficient, simply because he does not perceive the real world as accurately or so efficiently as does the healthy person. The neurotic is, therefore, not emotionally sick, but cognitively wrong. The self-actualizing man, in contrast, is able to see concealed and confused realities more swiftly than others.

The first form in which this capability takes place was noticed as an unusual ability to detect the false, fake, and dishonest personality, and in general to judge personalities efficiently. During informal experiments with college students, Maslow noted a "clear tendency" for the more secure (healthy) student to judge their professors with more accurate perception than those less secure.

As a group, the more self-actualized not only saw concealed and confused realities more correctly, but their predictions of the future, from whatever facts were at hand, seemed to be more often correct since they were based less upon wish, fantasy, fear, and anxiety, and more so on what was termed a clearer "perception."

If health and neurosis are, respectively, correct and incorrect perceptions of reality, then it could (and maybe should) follow that this superiority in the perceptions of reality eventuates in a superior ability to reason, to perceive the truth, to come to proper conclusions, to be logical in solutions, and, in general, to be more cognitively efficient. [1970,154.]

Another aspect to be noted under this characteristic is that self-actualizing people were more easily able to distinguish the fresh and concrete from the abstract and rubricized.

> "The consequence is that they live more in the real world of nature than in the man-made mass of concepts, abstractions, expectations, beliefs, and stereotypes that most people confuse with the world." [1970,154.]

The "healthy subjects" were unthreatened by the unknown; they accepted it, were comfortable with it, and were often attracted to it and challenged to meet it head-on.

Maslow stated that all the above might have come about simply because the same subjects were intellectuals; yet he rejected such a hypothesis through the following:

> "And yet we all know how many scientists with high IQ, through timidity, conventionality, anxiety, or other character defects, occupy themselves exclusively with what is known, with polishing it, arranging and rearranging it, classifying it, and otherwise puttering with it instead of discovering, as they are supposed to do." [1970,154-155.]

Self-actualizing people, on the other hand, do not cling to the familiar and known, nor is there a great need for certainty, order, and safety. They can be comfortably disorderly, approximate, vague, doubtful, uncertain, and indefinite -- dependent upon the situation.

This, according to Maslow, would be torture for most, however, the self-actualizing man can find a "pleasantly stimulating challenge." [1970,155.]

b. Acceptance (Self, Others, Nature)

Self-actualizing individuals find it possible to accept themselves without much chagrin; they have a relative

lack of guilt, shame, and extreme anxiety. They can accept their own human nature, with all its shortcomings, without real concern. They accept the frailties of human nature with an unquestioning spirit and find it easy to critique others, while simultaneously accepting them as they are.

Maslow [1970,156] wrote:

> "As the child looks out upon the world with wide, uncritical, undemanding, innocent eyes, simply noting and observing what is the case, without either arguing the matter or demanding that it be otherwise, so does the self-actualizing person tend to look upon human nature in himself and in others."

Self-actualizing people enjoy the so-called animal level of acceptance as well. They are characterized by hearty appetites for food, able to sleep soundly, and enjoy their sexual lives without unnecessary inhibitions. They can accept themselves not only on these lower levels, but also at the higher level represented by love, belongingness, honor, and self-respect.

Another facet related to self-acceptance is the ability of the self-actualizing person to be himself in the social environment. Hypocrisy, playing a game, and trying to impress others are not characteristic of the self-actualizing person.

The self-actualizing person, while free from neurotic guilt and shame, is not an absolute picture of freedom. Their guilt and shame, however, arise from easily improvable shortcomings, such as laziness, thoughtfulness, hurting others, and loss of temper. Maslow points out that "the general formula seems to be that healthy people will

feel bad about discrepancies between what is and what might very well be or ought to be. [1970,157.]

c. Spontaneity; Simplicity; Naturalness

Self-actualizing people are marked by behavior that reflects simplicity and naturalness, free from artificial straining for effect. This does not imply that they are unconventional in their behavior. It is noted, rather, that the unconventional tendencies are lodged in their thoughts and consciousness.

A self-actualized person wears conventionality much as a "cloak that rests very lightly upon his shoulders." He very seldom lets it hamper his movement, as it can easily be cast aside during times of importance. The self-actualizer usually behaves in a conventional manner simply because no great issues are involved or because others would be hurt or embarrassed.

Their childlike acceptance and spontaneity, Maslow says, implies a superior awareness of their own impulses, desires, and opinions -- something quite often missing in the normal adult, who Maslow says, is often not aware of what he is, of his wants, and of what his own opinions really are. [1970,159.]

The spontaneous person, therefore, is characterized as one who is growing to perfection and developing more fully in his own style.

d. Problem Centering

Maslow [1970,159] wrote that his self-actualizing subjects were "problem-centered" rather than being "ego-centered."

That is to say that they are focused on problems that are outside themselves.

These problems are not necessarily tasks that would be of personal preference for the individual, but rather tasks which the self-actualizing individual feels a responsibility or obligation to undertake for the good of mankind, or for the good of his nation, etc. In general, these problems are nonpersonal and concerned with the more basic and philosophical questions.

The self-actualizing individual, therefore, often leaves the impression of being above the smaller things in life, that is, the trivial; he is often more concerned with things "having a larger horizon," and believes "in the widest frame of reference." [1970,160.]

e. The Quality of Detachment; the Need for Privacy

Self-actualizers can be alone without discomfort; furthermore, they often prefer solitude and privacy to a larger extent than does the average man.

This preference for detachment may be reflected in some other qualities of the self-actualizing individual as well, for instance, being more objective, and retaining a high amount of dignity in undignified surroundings and situations. This objectivity and ability to be oblivious to their surroundings may also enhance their ability to concentrate on problems, more so than the average man. [1970,161.]

The self-actualizing and the deficiency-motivated differ greatly with regard to this characteristic. Maslow wrote:

> "Deficiency-motivated people must have other people available, since most of their main need gratifications (love, safety, respect, prestige, belongingness) can come only from other human beings. But growth-motivated people may actually be hampered by others. The determinants of satisfaction and of the good life are for them now inner-individual and not social." [1970,162.]

f. Autonomy; Independence of Culture and Environment

Self-actualizing people, not being deficiency-motivated, are dependent upon their own development, and their own potentials for their continuing growth.

As Maslow wrote:

> "Another meaning for autonomy is self-decision, self-government, being an active, responsible, self-disciplined, deciding agent rather than a pawn, or helplessly 'determined' by others, being strong rather than weak. My subjects make up their own minds, come to their own decisions, are self-starters, are responsible for themselves and their own destinies." [1969,161.]

g. Continued Freshness of Appreciation

Self-actualizers have the ability to appreciate over and over "the basic goods of life," with "awe, pleasure, wonder, and even ecstasy...," no matter how stale these could become to others. This is to say, that any sunset is just as beautiful as the first, and that any newborn is looked upon just as miraculously as the first. For such people even the casual work day can be exciting.

Although their choices of "beautiful objects" may differ (say for some, children playing, and for others, music) they all derive an exciting or inspirational strength from these basic experiences of life.

h. The Mystic Experience; the Peak Experience

Related closely to "freshness of appreciation" is the characteristic of the mystic or peak experience. Whereas the characteristic of continued freshness of appreciation can be seen as a continuing gratitude for good fortune or "counting your blessings," the mystic or peak experience has a stronger emotional basis.

The peak experience has been described as a feeling wherein one has a feeling of being, simultaneously, more powerful and, yet more helpless than one has ever experienced before. This can be accompanied by a feeling of great ecstasy and wonder and awe, and by the loss of place with the references of time and space, but it is most often accompanied by the feeling or conviction that something extremely valuable and important has been experienced.

In writing about the peak experience, Maslow acknowledges that not all self-actualizing people share this characteristic, as can be seen from the following passage:

> "My prediction is that this will turn out to be one of the crucial characterological 'class differences', crucial especially for social life because it looks as though the 'merely healthy' nonpeaking self-actualizers seem likely to be the social world improvers, the politicians, the workers in society, the reformers, the crusaders, whereas the transcending peakers are more apt to write poetry, the music, the philosophies, and the religions." [1970,165.]

i. Gemeinschaftsgefuhl (feelings for human beings)

Self-actualizing people have, in general, feelings of identification, sympathy, and affection for human beings; and because of this they have a genuine desire to help the human race. [1970,165.]

j. Interpersonal Relations

Self-actualizing individuals have deeper and more profound interpersonal relations than do other adults, since self-actualizing persons are capable of more fusion, greater love, and obliteration of the ego boundaries. As a result, they tend to have a smaller circle of friends and their profound love is shown for only a few.

This exclusiveness of love and devotion can coexist with Gemeinschaftsgefuhl, according to Maslow, as self-actualizers at least tend to be kind and show patience toward almost everyone.

As a result of these characteristics listed here, Maslow stated that it is not unusual for self-actualizers to attract admirers, friends, and even disciples of sort. [1970, 167.]

k. Democratic Character Structure

Self-actualizing people possess the quality of giving a measurable quantity of respect to any human being, simply because he is a human being. They can be friendly with anyone of suitable character regardless of race, color, class, etc. If often seems that they are indifferent to these classifications that are of obvious importance to others.

An example of such a quality is often found in an educational environment. Self-actualizers are willing to learn from anyone, as long as their teacher has something to teach them.

Self-actualizers are aware of how little they know in relation to what could and should be known. It is possible,

therefore, for them to be humble and respectful before persons who can teach them something that they do not already know or fully understand. [1970,168.]

1. Discrimination Between Good and Evil, Means and Ends

According to Maslow [1970,168-169], the self-actualizing individual is end-oriented, and the means to an end are subordinate to the end itself. However, they can also distinguish between good and evil, right and wrong; they are strongly ethical and have a set of definite moral standards, although they may not be religious as typically defined.

m. Philosophical, Unhostile Sense of Humor

Maslow, in reporting the characteristics of self-actualizing people, made one early finding that was easy to make; that is, that self-actualizing people have a "different" sense of humor. They do not consider funny that which the ordinary man laughs aloud over. Thus they do not laugh at "hostile humor," intended to hurt an individual, nor do they appreciate "superiority humor," intended to point out someone's inferiority. Characteristically, self-actualizers enjoy real-world or philosophical humor -- that which "pokes fun" at human beings in general, when they are foolish or forget how small a place in the universe they really occupy.

Lincoln's humor can serve as a suitable example.

> "Probably Lincoln never made a joke that hurt anybody else; it is also likely that many or even most of his jokes had something to say, had a function beyond just producing a laugh. They often seemed to be education in a more palatable form, akin to parables or fables." [1970,170.]

The self-actualizer seems to enjoy a less humorous personality than does the average person because of this. His philosophical humor normally elicits a smile rather than a laugh, and the average man might consider this rather on the sober and serious side. [1970,170.]

n. Creativeness

The one characteristic which Maslow stated was universal (without exception) in his self-actualizing subjects, was the capacity for a special kind of creativeness. It is different from the creative talents of Mozart; and more to the point, it resembles the naive and universal creativeness of unspoiled children. This creativeness presented itself, not in the form of writing books, composing music, etc., but rather in another humble and quite simple way. It was expressed in a greater freshness and efficiency of perception within the self-actualizing person again, as though seen through a child's eye.

In other positive terms, this creativeness shows itself through spontaneity (and other "less enculturated" actions). This, too, could have the consequence of appearing to others as being creative. [1970,171.]

o. Resistance to Enculturation

Self-actualizing people are not easily identifiable by their culture. They get along well with their culture yet they have a profound resistance to enculturation, and maintain their inner detachment from the culture.

The relationship of these healthy people with their culture is a complex one, but the following characteristics or traits have been noted.

(1) These self-actualizing people all fall within the apparent conventions in clothing, language, food, and ways of doing things. And yet, they are realistically not conventional, certainly not those considered fashionable or chic. Since choice of shoes, style of hair, or manner of behaving at a party are not of primary concern; they tend to "shrug their shoulders" with any such trivial matters.

(2) They do not show active impatience or discontent with the culture, nor are they preoccupied with changing it quickly.

(3) An inner feeling of detachment is not always conscious, but is somehow displayed by all self-actualizers. They frequently, in fact, seem to be able to stand back from their culture and analyze it, as if they were not really part of it. Their liking for privacy is probably also indicative of this detachment.

(4) They are ruled by the "laws of their own character rather than the rules of society." [1970,173-174.]

p. Imperfections of Self-Actualizing People

Self-actualizing individuals, after all the good is said and done, do have some rather "human" (or average) characteristics that surface.

It has been said that self-actualizers may show signs of silly, wasteful, and thoughtless habits. Due to their intense concentration, they may also appear to be humorless and appear absent-minded, thus forgetting their social politeness.

When expressing their dislike for party-going and meaningless conversation, they, too, can become stubborn and irritating. They may use language, in some situations, which is offensive, distressing, insulting, and shocking to others.

Their strength, as described earlier, can be interpreted as a certain ruthlessness or cold-heartedness. Their independence of others is sometimes looked upon as being snobbish.

It should be pointed out that in the final analysis, they, too, have some guilt, sadness, and anxiety. They are not totally free from internal strife and conflict, as observation has shown.

To quote Maslow [1970,176]:

> "There are no perfect human beings!"

As Maslow's life headed for its final sunset, he spent time organizing the above mentioned characteristics into categories and sub-categories. Such detail of hierarchy need not be presented here since the purpose of this section has been to present some historical and literary review of a concept based upon "mental health."

In the following section, a device for measuring self-actualizing individuals will be examined, and its use as a tool by management is considered.

IV. SHOSTROM'S POI

In the preceding sections, historical and managerial views of "self" were presented, as well as the history of some of the literature on the concept of self-actualization. In this section, a brief historical note on the use of the POI is addressed, and the interpretation and critique of the POI (which was constructed by Shostrom to measure self-actualization) will be offered.

A. PAST STUDIES ON THE POI

The POI, due to its ease of administration, has been used in several research studies.

Self-actualizing individuals have been shown, by Shostrom [1966], to be easily differentiated from non-self-actualizing persons, when both samples are chosen "clinically."

Advanced outpatients in therapy can also be distinguished from earlier therapeudical outpatients, as demonstrated by Shostrom and Knapp [1966].

Other data from research has been obtained from clients undergoing "psychological counseling," and was addressed by McClain [1970].

It has come to this author's attention, however, that although the POI has been used in group sensitivity training and with pre and post-examination of individuals having undergone "peak experiences," that most of the published writings, familiar to this author, have dealt with bi-polar samples of individuals undergoing some sort of "psychological

treatment." A break from such a historical norm will be addressed later in this thesis, after consideration is given to the POI exam itself.

B. THE POI SCALES AND INTERPRETATIONS

The POI is composed of fourteen numbered scales, two of which (time competence and inner directed support, and/or their ratio scores) may be considered major scales; the other subscales are intended to reflect some facet of self-actualization. A discussion of each follows.

1. Time Competence (Tc)

Time Competence is also expressed as a Time Ratio (Ti:Tc) of Time Incompetence (Ti) to Time Competence (Tc); that is, time competence, a scale designed to measure a person's orientation to the present, is contrasted to time incompetence, which describes the extent to which a person lives with the negative aspects of the past and present.

Shostrom [1966,5] wrote:

> "The time competent person lives primarily in the present with full awareness, contact and full feeling reactivity while the time incompetent person lives primarily in the past, with guilts, regrets, and resentments, and/or in the future, with idealized goals, plans, expectations, predictions, and fears."

He continued in a later section:

> "The self-actualized person is primarily Time Competent and thus appears to live more fully in the here-and-now. He is able to tie the past and the future to the present in meaningful continuity. He appears less burdened by guilts, regrets, and resentments from the past than is the non-self-actualized person, and his aspirations are tied meaningfully to present working goals.... The self-actualized individuals past and future orientations are depicted as reflecting positive mental health

to the extent that his past is used for reflective thought and the future is tied to present goals.

2. Inner Support (I)

This scale is also expressed as a Support Ratio (O:I). It is developed to contrast an individuals orientation to himself (I) or others (O).

Shostrom [1966,17] wrote that the inner directed person incorporated a "gyroscope" which is started by parental influence and altered or supported later by other figures of authority. Shostrom further stated that the source of direction is internal in the sense that the individual is guided by internal motivations rather that externalities. Thus, the inner-directed man "goes through life apparently independent, but still obeying this internal piloting."

The outer-directed person, on the other hand, may become "over-sensitive" to the pressures of authoritative figures in his environment, or from peer pressures, or "others" opinions. Approval, then, becomes the ultimate goal for the outer-directed individual.

Shostrom [1966,17] wrote:

> "The support orientation of the self-actualizing persons tend to be between that of the extreme other and the extreme inner-directed person. He tends to be less dependency-or deficiency-oriented than either the extreme inner-or the extreme other-directed person.

3. Self-Actualizing Values (SAV)

This scale, derived mainly from Maslow's concept of self-actualization, attempts to quantify the degree which individuals hold to the values proposed by Maslow. A high score was designed to equate a high degree of understanding and

living of the principles (such as acceptance, spontaneity, problem centering, autonomy, and the like) proposed by Maslow in his self-actualizing concept. A low score indicates that the individual rejects such principles. [1966,20.]

4. Existentiality (Ex)

This scale measures the flexibility and judgement which the individual initiates in application of such values and principles measured by the SAV scale. Higher scores indicate flexibility in application of such values or principles to one's life. Lower scores may indicate that the person holds values so rigidly as to become dogmatic or compulsive. [1966,20.]

5. Feeling Reactivity (Fr)

This scale was designed to measure one's sensitivity to his own needs and feelings. A low score implies insensitivity to one's own needs and feelings. [1966,20.]

6. Spontaneity (S)

This scale was designed to measure the individuals ability to respond or express feelings in a spontaneous manner. A lower score may indicate fear of openly expressing one's feelings. [1966,20.]

7. Self-Regard (Sr)

This scale was designed to measure the ability to like one's self and to accept one's self. A low score reflects low self-regard, whereas a higher score indicates high self worth because of inner worth and one's strength as a person. [1966,20.]

8. Self-Acceptance (Sa)

Self-acceptance measures one's ability to accept himself, in spite of the weaknesses and faults that he may perceive. Shostrom states that self-acceptance is harder to achieve than the previous scale (self-regard); however, both are necessary for self-actualization. It is common, therefore, to classify the previous two scales as reflecting the general area of self-perception. A self-actualizing individual can perceive himself in such a fashion. [1966,20.]

9. Constructive Nature of Man (Nc)

This scale was designed to measure the individual's ability to resolve dichotomies of goodness-evil; masculine-feminine; selfishness-unselfishness; and the like. A high score, therefore, measures the synergic ability to understand one's human nature. Shostrom indicates that a high score means one sees man as being basically good. [1966,20.]

10. Synergy (Sy)

This scale was designed to measure the ability to meaningfully relate opposites in life, not merely discriminate between them. This is to say that the self-actualizing person sees that work and play, lust and love, selfishness and selflessness, are not really opposites at all, but are related dichotomies. [1966,20.]

11. Acceptance of Aggression (A)

A high score here means that the individual can accept anger or aggression within one's self as natural. A low score on this scale means that one denies, or represses, such feelings of anger and aggression. [1966,21.]

12. Capacity for Intimate Contact (C)

This scale was designed to measure one's ability to develop meaningful relationships with others without difficulty. The abilities to express versus impress, being versus pleasing, and the ability to relate intensely to another person, either aggressively or tenderly, are other measurable dimensions which may facilitate an understanding of developing "warm inter-personal relationships." A low score here means that an individual cannot, without difficulty, develop an "I-Thou" relationship in the here-and-now. [1966,21.]

C. CRITIQUE OF THE POI

Richard W. Coan, in the Seventh Mental Measurement Yearbook, was critical of the emphasis which Shostrom placed on the time ratio score (Ti:Tc) and of the strong bias toward autonomy. In the same article, however, he expressed praise for Shostrom for turning the center of attention away from psychopathology to that of measuring "positive personality traits."

While Shostrom's emphasis on the time ratio score is evident in his manual, he also shows constraint in its use.

> "When a quick estimate is desired of the examinees level of self-actualization, the Time Competence (Tc) and the Inner Directed (I) scales only may be used. Also, for correlational or other statistical analysis it is recommended that scores from the Time Competence scale and the Inner Directed scale be used in preference to the ratio scores...." [1966,7.]

Jung noted that it is well impossible for any author to write truly objectively; every word uttered carries something of the author's self -- of his special and unique self with its particular history and its own particular world. "Our

way of looking at things is conditioned by what we are." People, therefore, see things differently, and express them differently. [1933,117-118.] Therefore, this author cannot be so critical of one expressing his bias in his work.

Shostrom, in truth, has helped turn attention toward measurement of positive mental health (or "positive personality traits"). The results of administering the Shostrom POI, however, remain difficult to analyze. Several points prompted such a statement, and these points are discussed below.

Shostrom, while offering profile charts of "group types" from various backgrounds, such as the typical business man or the typical college student, does little in the way of offering statistical data to encourage comparison. Shostrom's manual [1966,26] offers the means, standard deviations, and comparison of differences between samples "nominated" as "Self-Actualized," "Normal," and "Non-Self-Actualized"; however, this merely shows how the nominated groups performed. It is quite difficult, either from the use of this table or the profile charts, to fit score results to one of his categories. Thus, given an individual of certain "nominated" type, certain scores on the POI can be predicted. The opposite is not true, however; given a score by an individual, it is not necessarily predictable to which group he belongs due to the statistically significant closeness of the scale means presented. This is especially true when trying to differentiate a score which could represent a "Self-Actualized" or "Normal" classification.

Shostrom offers an intercorrelational matrix for the scales of his Personal Orientation Inventory, as well as correlations against the MMPI and the EPI among others. He also offers reliability and validity studies throughout the later stages of his manual. It is not considered within the scope of this thesis to examine the credibility of such, and will, therefore, not be addressed further.

It is of concern to this author, however, that adequate appreciation be given the author of the exam for its ease of administration. Data, due to the guidance set forth in the manual, can be readily scored; the absence of a large administrative burden was, therefore, conducive to effective and efficient utilization of this author's time in collecting data.

If several hundred different test results (or an even greater number) were to be offered as data, machine scoring would become a practical necessity. This, too, can be provided.

One last criticism will be offered in this section.

Students, from this author's sample, expressed that the POI becomes tiring and monotonous, even though the length is only 150 questions.

The use of bi-polar statements for questions throughout the test, as seen by the example below, while offering a clear cut choice between the two distractors, could readily tend to become monotonous.

Example: Item 147.

a. People are basically good.

b. People are not basically good.

Having given proper attention to the POI, the interpretation of its scales, and discussion of its past use, the next section sets forth this author's endeavor to use the POI as a possible predictor of grade point averages at the Naval Postgraduate School.

V. CORRELATION OF QPR TO POI SCORES

A. REASONS FOR RESEARCH

The Shostrom POI, as stated earlier, was constructed to measure a person's level of self-actualization. It, therefore, gave this student of management a tool to test his hypothesis.

The hypothesis, simply stated, was that there is a positive correlation between a student's QPR (grade point average) and his measured level of self-actualization. A more precise statement of this hypothesis was offered in the introduction to this thesis, but the above simple statement will suffice for the present.

The author's original interest for testing such a hypothesis was linked (or prompted) by two things. First, several of the author's contemporaries, in conducting studies for professors at the Naval Postgraduate School, were seeking to find a correlation between QPR and any of a number of other factors, such as Graduate Record Exam scores, GCT, undergraduate performance, colleges attended before graduate school, and the like. Their efforts, while not totally unsuccessful, did leave them dissatisfied with the results.

The other thing which had an influencing factor was that, simultaneously, this student found himself enrolled in a course of study that was considering the concepts of Maslow and others. Fascinated by a psychology investigating the "mentally healthy" person, this student found himself reading literature on the

subject of self-actualization. Several descriptive word sets kept occurring over and over in these readings. Some of them follow:

(1) ...as developing and utilizing all of his unique capabilities and potentials.

(2) ...a fully functioning person.

(3) ...a mature person.

(4) ...able to organize impulses into patterns of striving and interests.

(5) ...this superiority in the perception of reality eventuates in a superior ability to reason.

(6) ...keeps things in perspective.

(7) ...efficient, able to solve problems at a complex level, and able to use the new solutions.

(8) ...can turn work into play, and duty into pleasure.

(9) ...gets satisfaction from doing a more perfect job.

Without expanding further, it seemed clear that these words used by authors to describe a self-actualizing person, could also be applied to some of the students that were evidenced in the author's environment.

Thus, because of these two factors this study was initiated.

B. DESCRIPTION OF SAMPLE

The data gathered for this study was elicited from twenty-four of the author's peers, enrolled in the Information Systems (Telecommunications) curriculum at the Naval Postgraduate School. While being of various rank, experience, and background, the "typical" or "average" student that submitted data

for this study can be categorized by the following characteristics.

a. Rank -- Lieutenant Commander

b. Age/Sex -- 30 year old/male

c. Length on Active Duty -- 10 years

d. Marital Status -- Married

e. Undergraduate School Attended -- State College

f. Experience and Future Assignments -- VietNam Veteran with future orders to a communication billet.

While not all inclusive, these characteristics were presented soley as an indicator of the type of man tested.

The twenty-four individuals tested represented the entire population of the curriculum that had a QPR established for a period of time in excess of two school quarters (approximately 40 total credited hours of class instruction). This point will be discussed later.

C. ANALYSIS OF DATA AND METHODOLOGY

As stated earlier, the sample size was limited to twenty-four of the author's peers attending classes at the Naval Postgraduate School, and presently enrolled in the same curriculum as the author. Recognizing that a sample of such size could not produce any final conclusive evidence, it was prompted, however, by several reasons of practicality -- namely, student cooperation, monetary expense to the author in obtaining sufficient POI specimen sets, and the time factor for hand-scoring.

Questions concerning the skewness of QPR's at the school were raised, as well as any causal relationships that could

be discerned from a possible correlation between QPR and self-actualizing scores on the POI. Other factors, such as high IQ, might well be more indicative of a high QPR than scores obtained on a personality exam; could legitimate account be made of such factors?

Realizing these limitations and criticisms, this author, perhaps stubbornly, pursued the testing of his initial hypothesis.

A thought from Maslow lent encouragement:

> "A methodologically satisfactory experiment, whether trivial or not, is rarely criticized. A bold, groundbreaking problem, because it may be a 'failure' is too often criticized to death before it is ever begun." [1970,12.]

To this author's knowledge, no one had ever tested such a hypothesis as stated herein. Examination of an unknown, therefore, helped to lend a greater degree of reasonableness to the research.

For analysis of the data and testing the hypothesis, subprograms such as Pearson correlation, factor analysis, and linear regression from the Statistical Package for the Social Sciences (SPSS) were used. Some of the results obtained are discussed in the next section.

D. RESULTS

The hypothesis tested is presently restated for clarity as:

H_o: There is a direct (positive) correlation between graduate students' grade point averages and scores obtained from the Shostrom POI, within the Information Systems (Telecommunications) curriculum at the Naval Postgraduate School.

The null hypothesis may be stated simply as:

H_1: There is no correlation between grade point averages and scores on the Shostrom POI.

Using SPSS, simple correlation coefficients between QPR and the twelve scales of the POI were obtained by use of the sub-program Pearson correlation (PEARSON CORR.).

These zero-order product-moment correlation coefficients ranged from a low of -0.0834 to a high of +0.3893 at the .01 level of significance. It was further found that eight of the twelve scales had correlation coefficients which tended toward zero.

The original hypothesis (H_o), as stated above, was rejected. The null hypothesis (H_1) was, therefore, accepted.

Inasmuch as these results were of little significance, this author employed multi-regressional techniques to the data base in an effort to extract possible useful information. Since the multi-regression sub-program employed in SPSS can properly handle only ten dependent variables, a factor analysis of the scales was examined in an effort to extract the most significant variables. The statistical results were, again, of little significance in supporting the original hypothesis. After having identified the more significant scales, the largest multiple R coefficient obtained was +0.64252, and this was obtained only after six of the POI scales had been loaded into the regression. These were: (1) A -- Acceptance of Aggression, (2) Nc -- Constructive Nature of Man, (3) SAV -- Self-Actualizing Values, (4) I -- Inner Direction, (5) Sr -- Self-respect, and (6) Sy -- Synergy.

An effort was then made to use the multi-regression sub-program on grouped data. Scores from the POI were standardized, and then categorized according to this author's interpretation of the implied relationships between scales. Sr -- Self-Respect and SA -- Self-Acceptance, as an example, were grouped into a category that measured self-perception. Again, the results, were of little significance in support of the tested hypothesis, as the highest multiple R coefficient noted was +0.45105.

By use of the SPSS sub-program SCATTERGRAM, plots of each POI scale versus QPR were then graphed. The resulting graphs pictured some interesting results. Instead of constant or random plots, as were expected by this author, several scales, when plotted against QPR, exhibited curvilinear characteristics. Figures 1-3 depict the plots of TQPR (total QPR) and the POI scales I (Inner Direction), SAV (Self-Actualizing Values), and A (Acceptance of Aggression), respectively.

The null hypothesis, that of no correlation, had been accepted; however, these plots visually depicted an existing relationship between QPR and some of the POI scales. In a sentence, they were not merely linear fits, but curvilinear. The low correlations obtained from the Pearson correlation could, therefore, be explained by such visual graphs.

Intrigued by these plots, this author collected additional data for analysis. An additional twenty-six students were asked to answer the questions on the Shostrom POI that were related to the SAV (Self-Actualizing Value) scale. Student selection, however, was not a random process. The author

endeavored to fill the void exhibited in Figure 2 by selecting individuals with QPR's that ranged, roughly, from 3.25 to 3.50, to examine the possibility of an existing parabolic curve.

The individuals selected were from curricula similar to that stated in the original hypothesis. Since many of their courses were the same as those taken by the hypothesized curriculum, factors of grade skewness among curricula were minimized as much as possible.

The results of this study, relating total QPR to SAV (Self-Actualizing Value), is exhibited in Figure 4. A definite curvilinear relationship existed.

In an effort to formulate an equation which would typify this sort of relationship, the author returned to the original data so as not to further bias any study between QPR and SAV (Self-Actualizing Values). By application of a FORTRAN program, written by the author, a curve was fit through the set of data via the "least squares" method. It is realized that application of the "least squares" method is usually reserved for linear fits or curvilinear fits which can be reduced to an approximated linear relationship. Although this is always possible theoretically, the proper functions may be exceedingly complicated or may not be easily reduced. Therefore, it is often more satisfactory and practical to work with non-linear relationships. The simplest curve to use as a regression model, if a straight line will not suffice, is a parabola. Its equation can be written in the form:

$$y = a_o + a_1X + a_2X^2.$$

Assuming a parabolic relationship of the aforementioned form, the following equation was found to be typical of the relationship between total QPR and the Self-Actualizing Value (SAV) scale of the Shostrom POI:

$$TQPR = [.0045544(SAV^2)] - [.13862(SAV)] + 4.3276.$$

Thus, while the author makes no pretense of using the above equation as an universal predictor of grades, the above equation is merely offered as a reasonable relationship between total QPR and Self-Actualizing Values (SAV) scores contained within the data. The parabolic form indicates that another factor, perhaps need-achievement, or the like, should be considered along with self-actualizing values to form an adequate predictor of grades.

Research intended to identify other factors which may tend to explain such a relationship, while being beyond the scope of this thesis, is suggested as a possible avenue to future studies in this area of research.

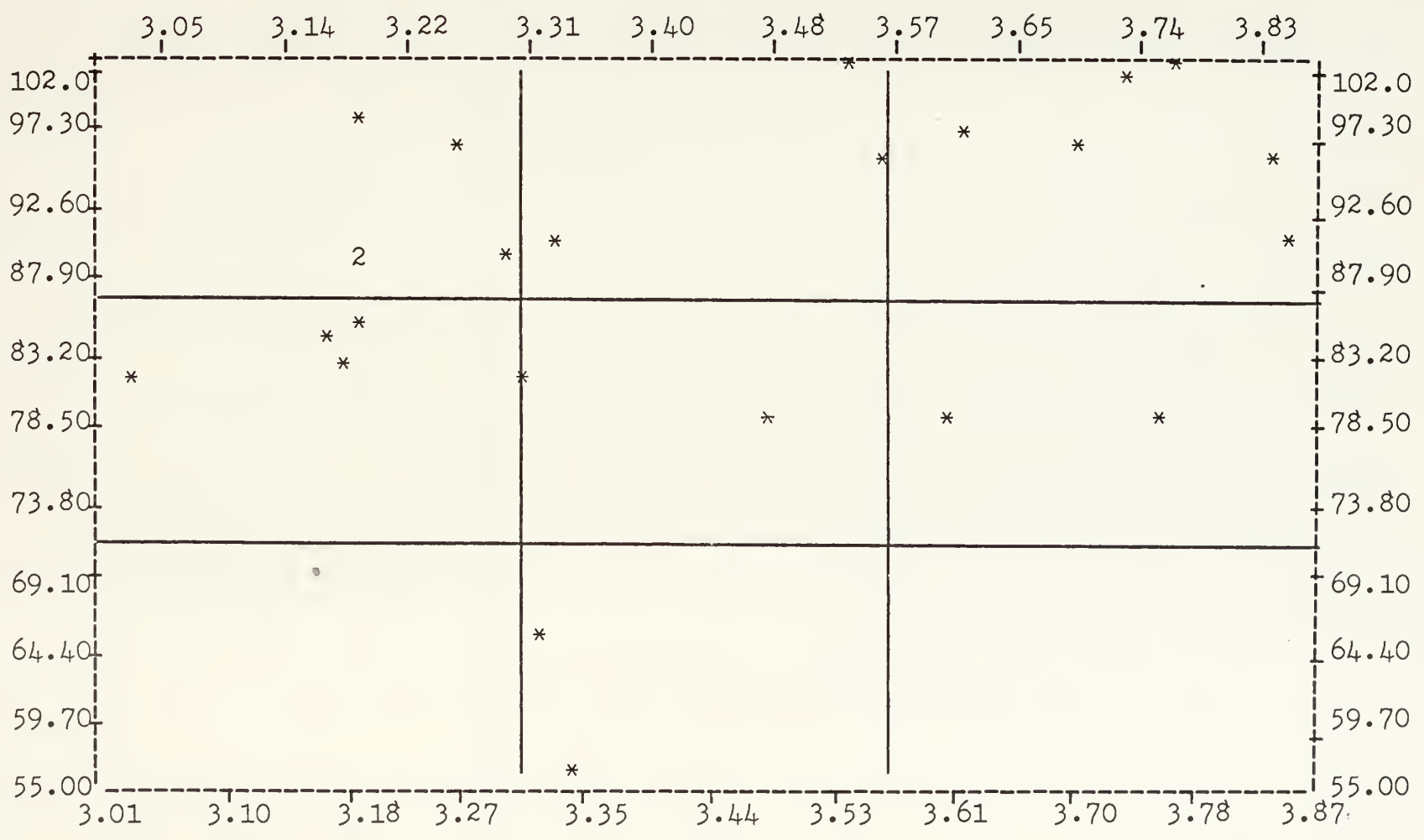
SCATTERGRAM OF (DOWN) I, (ACROSS) TQPR
3.05
3.14
3.22
3.31
3.40
3.48
3.57
3.65
3.74
3.83
102.0
97.30
92.60
87.90
83.20
78.50
73.80
69.10
64.40
59.70
55.00
2
3.01
3.10
3.18
3.27
3.35
3.44
3.53
3.61
3.70
3.78
3.87

FIG. 1

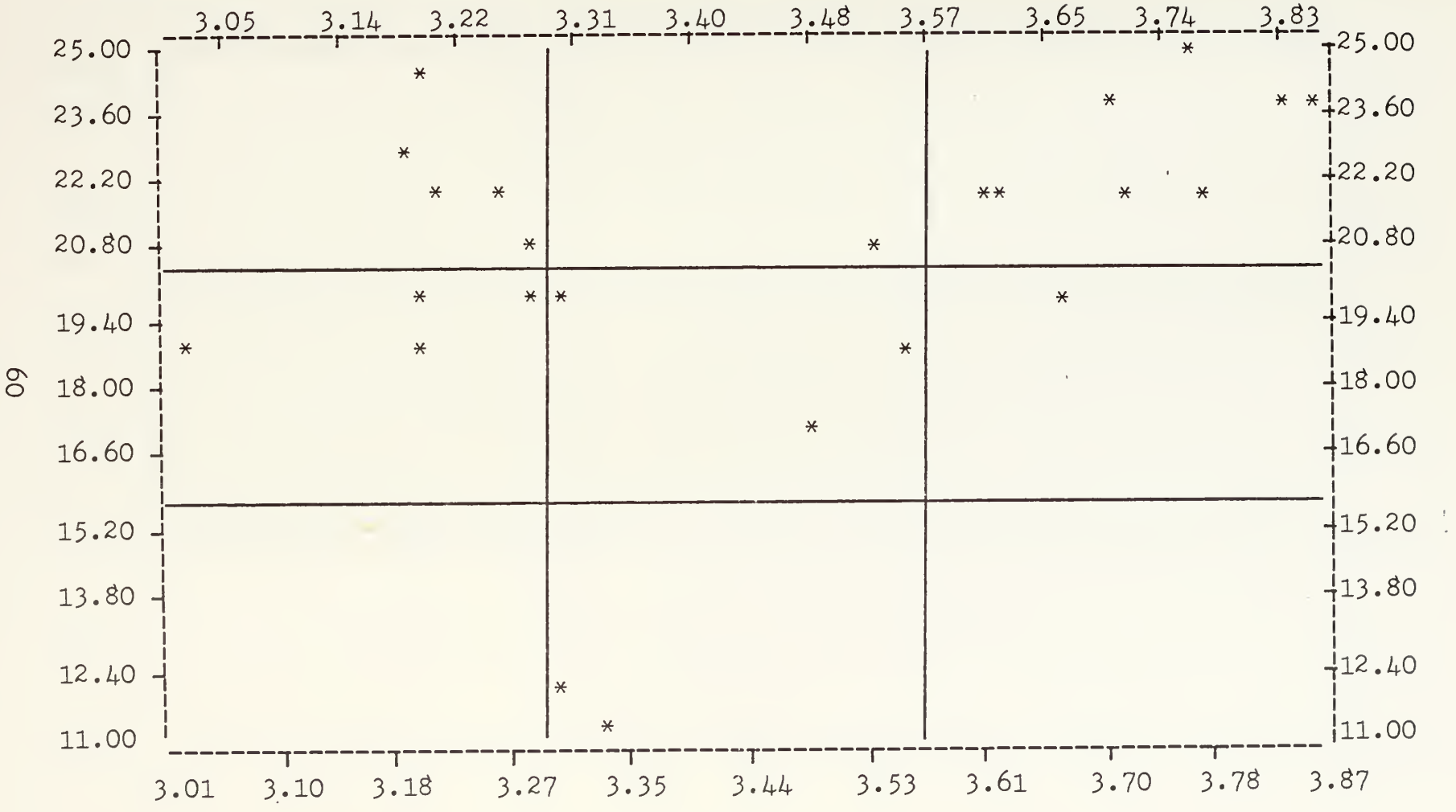
SCATTERGRAM OF (DOWN) SAV, (ACROSS) TQPR
3.05 3.14 3.22 3.31 3.40 3.48 3.57 3.65 3.74 3.83
25.00
23.60
22.20
20.80
19.40
18.00
16.60
15.20
13.80
12.40
11.00
09
3.01 3.10 3.18 3.27 3.35 3.44 3.53 3.61 3.70 3.78 3.87

FIG. 2

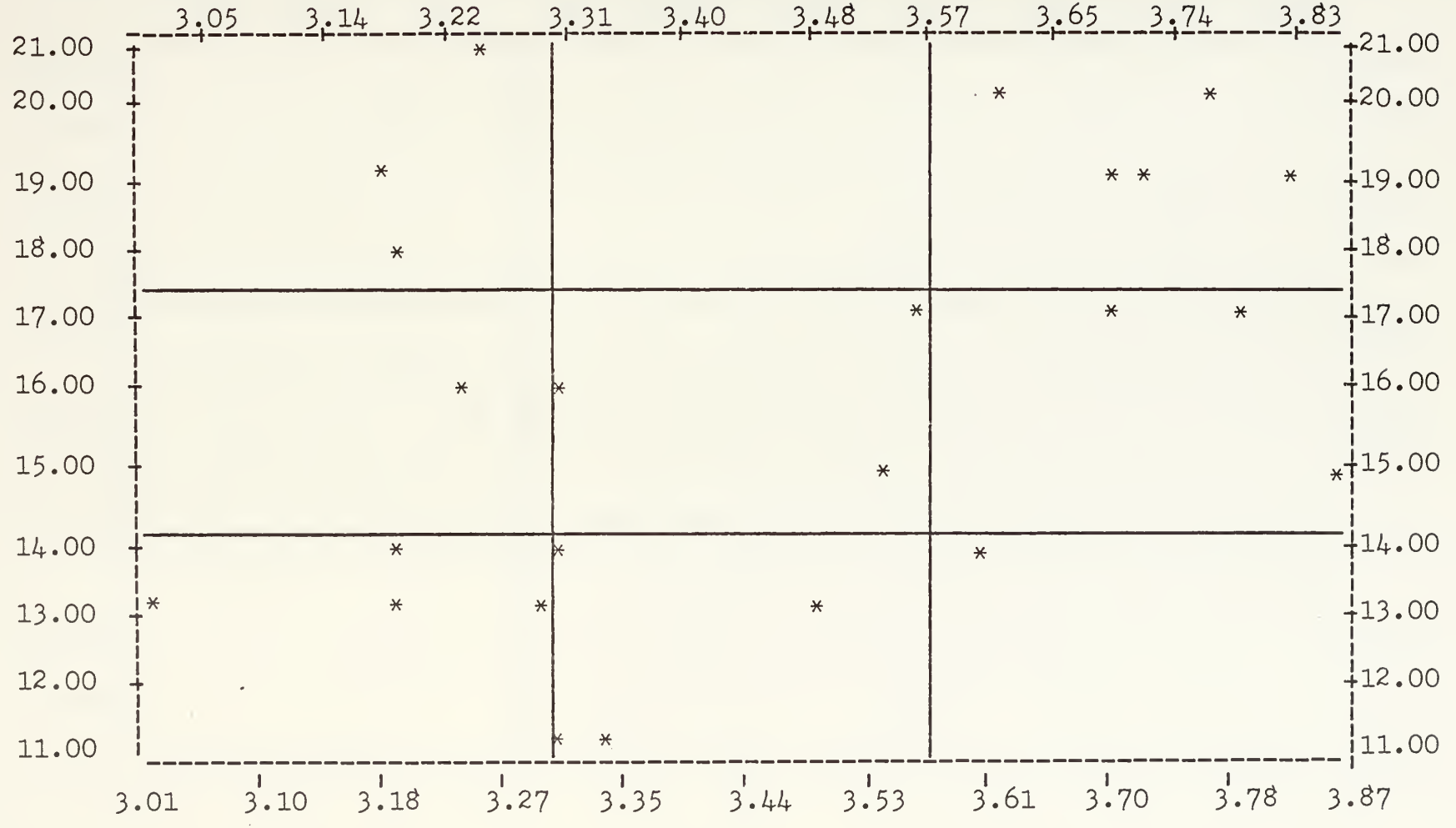
SCATTERGRAM OF (DOWN) A, (ACROSS) TQPR
3.05
3.14
3.22
3.31
3.40
3.48
3.57
3.65
3.74
3.83
21.00
20.00
19.00
18.00
17.00
16.00
15.00
14.00
13.00
12.00
11.00
3.01
3.10
3.18
3.27
3.35
3.44
3.53
3.61
3.70
3.78
3.87

FIG. 3

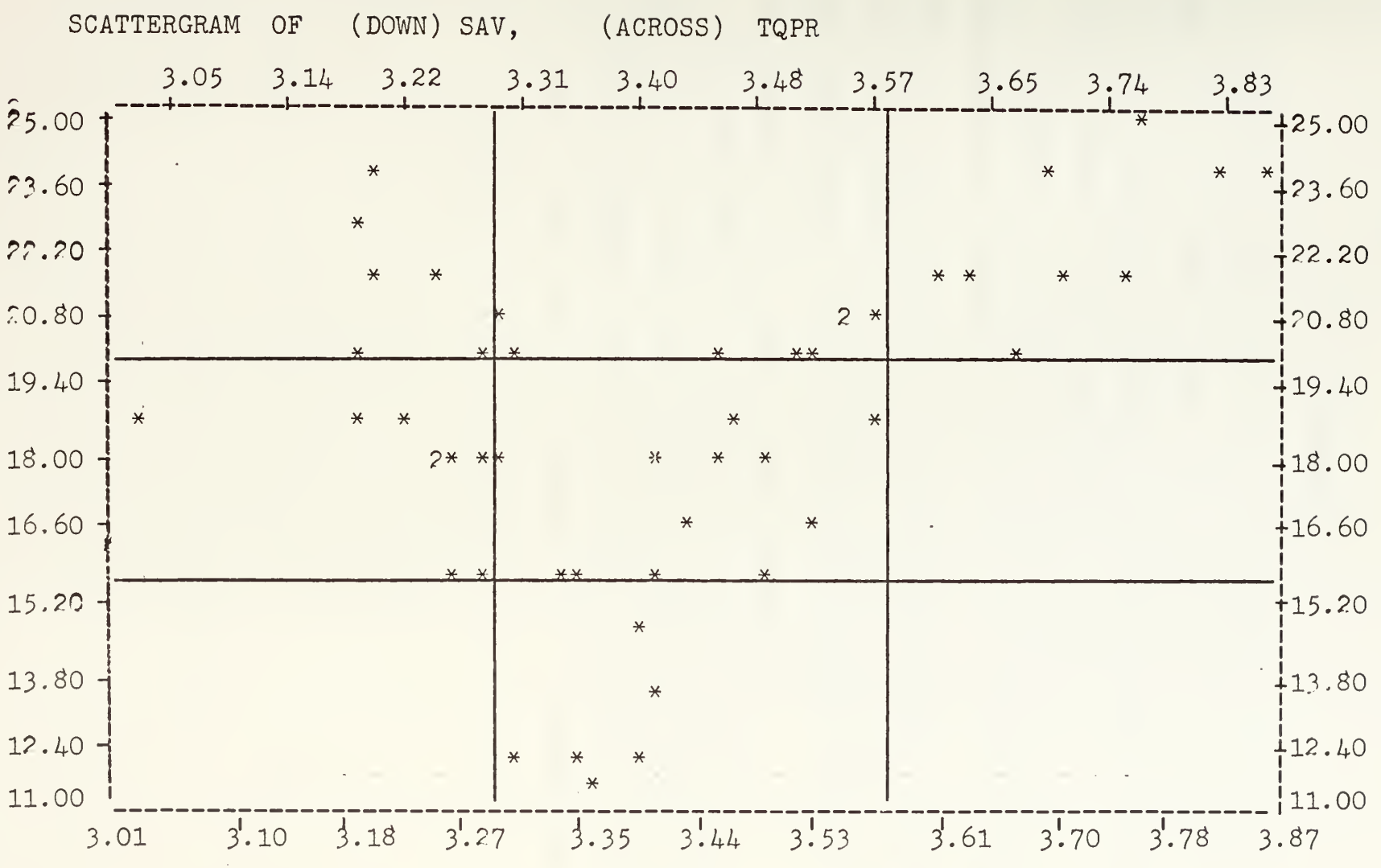
SCATTERGRAM OF (DOWN) SAV, (ACROSS) TQPR
3.05
3.14
3.22
3.31
3.40
3.48
3.57
3.65
3.74
3.83
25.00
23.60
22.20
20.80
19.40
18.00
16.60
15.20
13.80
12.40
11.00
3.01
3.10
3.18
3.27
3.35
3.44
3.53
3.61
3.70
3.78
3.87

FIG. 4

VI. CONCLUSION

This thesis has endeavored to investigate several aspects of self-actualization. The concept of self and its link with management philosophy has been discussed, as well as the concept of self-actualization, itself.

The author, in search for a useful managerial tool, has considered the Shostrom POI and its scales within the framework of a unique approach to grade point averages. Although the null hypothesis was accepted, there is reasonable evidence that relationships between grade point averages and scores on the Shostrom POI do exist in curvilinear form.

Research intended to examine the several factors which might work in conjunction with Self-Actualizing Values (SAV) to form an adequate predictor of grades, while being beyond the scope of this thesis, is deemed worthy of further pursuit.

BIBLIOGRAPHY

Adams, James T., quoted in G. Myrdal, An American Dilemma, Harper Brothers, 1944.

Allport, Gordon W., Becoming: Basic Considerations for a Psychology of Personality, Yale University Press, 1955.

Allport, Gordon W., Pattern and Growth in Personality, Holt, Rinehart, and Winston, 1961.

Beach, Dale S., Personnel: The Management of People at Work, The Macmillan Company, Ltd., 1970.

Cofer, C. N. and Appley, M. H., Motivation: Theory and Research, John Wiley and Sons, Inc., 1964.

Coleman, James C., Personality Dynamics and Effective Behavior, Scott, Foresman, and Company, 1960.

Dale, Ernest, Management Theory and Practice, McGraw-Hill Book Company, 1969.

de Spinoza, Benedictus, Ethics, Oxford University Press, 1927.

Erb, Everett, The Psychology of the Emerging Self, F. A. Davis Company, 1967.

Fromm, Erich, Man for Himself, Rinehart and Company, Inc., 1947.

Gale, Raymand F., Developmental Behavior, The MacMillan Company, 1969.

Goldstein, K., The Organism, American Book, 1939.

Hahn, Milton E., Psychoevaluation, McGraw-Hill, 1963.

Herzberg, F., Mausner, B., and Snderman, B., The Motive to Work, John Wiley and Sons, 1959.

Herzberg, Frederick, Work and the Nature of Man, The World Publishing Company, 1966.

Hobbes, Thomas, Leviathan, The Bobbs-Merrill Company, Inc., 1958.

James, William, Principles of Psychology, Henry Holt Company, 1896.

Jepson, Peter, Some Effect of Self-Actualizing Growth Psychology on Teenagers, Ph.D. Thesis, United States International University, 1969.

Jung, C. G., Modern Man in Search of a Soul, Harcourt, Brace, and World, Inc., 1933.

Likert, Rensis, The Human Organization, McGraw-Hill Book Company, 1960.

Luthans, Fred, Organizational Behavior, McGraw-Hill Book Company, 1973.

Machiavelli, Niccolo, The Prince, Appleton-Century-Crofts, Inc., 1947.

Maslow, A. H., Motivation and Personality, Harper and Brothers, 1954, 2d ed., Harper and Row, 1970.

Maslow, A. H., Deficiency Motivation and Growth Motivation, University of Nebraska Press, 1955.

Maslow, A. H., Toward a Psychology of Being, D. Van Nostrand, 1968.

Maslow, A. H., The Farther Reaches of Human Nature, Viking Press, 1971.

McClain, Edwin W., "Personal Growth for Teachers in Training Through Self-Study," Journal of Teacher Education, 21, 1970.

McGregor, Douglas, The Human Side of Enterprise, McGraw-Hill Book Company, 1960.

Ommanney, P. C. and Fifield, M. R., Self-Actualization, Xerox University Microfilms, 1974.

Repp, William, "Motivating the Now Generation," Personnel Journal, July 1971.

Roethlisberger, F. J. and Dickson, W. J., Management for the Worker, Harvard University Press, 1939.

Rogers, Carl R., On Becoming a Person, Houghton-Mifflin, 1961.

Ross, W. D., trans. of Ethica Nicomachea, Oxford University Press, 1925.

Shostrom, E. L., Manual for the Personal Orientation Inventory, San Diego, California: Educational and Industrial Testing Service, 1966.

Shostrom, E. L. and Knapp, R. R., "The Relationship of a Measure of Self-Actualization (POI) to a Measure of Pathology (MMPI) and to Therapeutic Growth," American Journal of Psychotherapy, 20, 1966.

Taylor, F. W., Principles of Scientific Management, Harper and Row, 1919.

Weber, Max, The Protestant Ethic and the Spirit of Capitalism, Charles Scribner's Sons, 1930.

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